

UNCLASSIFIED

MSG DTG 041430Z AUG 14

FROM COMMANDER, AMCOM, REDSTONE ARSENAL, AL //AMSAM-SFA//

SUBJECT - SAFETY OF FLIGHT (SOF), TECHNICAL, ALL OH-58A/C
SERIES AIRCRAFT, DISCREPANT SELF LOCKING NUTS, H-58-14-SOF-05

NOTE

This message is issued per AR 750-6 to Commanders of Army Commands (ACOM), Army National Guard (ARNG), Army Service Component Commands (ASCC), and Direct Reporting Units (DRU). Commanders must retransmit this message to all subordinate organizations. Notify the AMCOM SOF compliance officer at "usarmy.redstone.amcom.mbx.safety-sof-team@mail.mil" when complete.

NOTE

Per AR 750-6, commanders/directors in the grade of major general or civilian equivalent may authorize temporary exception from message requirements. These exceptions may only occur during combat operations, matters of life or death in civil disasters, or other emergencies when aircraft operation is required.

NOTE

Commanders unable to comply with the requirements of this message within the time frame specified will change the affected aircraft status symbol to a Grounding //X//.

Commanders, facility managers, and contractors at all levels will not issue aircraft until they are in compliance with this message. Aircraft transferred to the U.S. Government via DD Form 250 after the message DTG are in compliance with message requirements.

NOTE

A listing of all messages and any required reports, supplements, or addendums can be downloaded at:
"<https://asmprd.redstone.army.mil>".

1. SUMMARY -

1.1. Background - A Production Quality Deficiency Report (PQDR) has been received from the field identifying two (2) cracked Self Locking Nuts, installed on an OH-58D swashplate. The Nuts are designed primarily for use in areas that require high

tensile strength and reliability, but are used in multiple applications on all OH-58 series aircraft.

1.2. Message Purpose - Perform a one-time inspection for suspect Self Locking Retaining Nuts. This inspection will be in two (2) phases - the first for Critical Components and the second for Non-Critical Components.

2. END ITEMS AFFECTED - All OH-58A/C series aircraft.

3. ASSEMBLIES/COMPONENTS/PARTS AFFECTED -

3.1. Suspect Assemblies/Components/Parts -

Nomenclature	PN	NSN
Nut, Self Locking	MS21042L4	5310-00-807-1475

3.2. Additional Assemblies/Components/Parts Affected.

Nomenclature	PN	NSN
Jackshaft Assy, Cont	206-001-174-3	1680-00-125-8871
Hub Assembly, Main R	206-011-100-23	1615-01-030-6652
Hub Assy, Rotary	206-011-100-131	1615-01-092-6746
Hub Assy, Main R	206-011-100-143	1615-01-129-6508
Blade, Rotary Wing	206-011-250-3	1615-00-443-1095
Blade, Rotary Wing	206-011-250-113	1615-01-137-8137
Boom, Aircraft	206-032-004-53	1560-00-347-6767
Boom, Aircraft	206-032-004-57	1560-01-017-7496
Transmission Assy,M	206-040-003-5	1615-00-121-6543
Transmission Assemb	206-040-003-23	1615-01-034-0405
Housing, Bearing Uni	206-040-344-5	3130-00-173-2303
Housing, Bearing Uni	206-040-345-9	3130-00-164-3899
Housing, Bearing Uni	206-040-346-9	3130-00-164-3913
Gearbox, Rotary Rudd	206-040-400-9	1615-00-432-2492
Gearbox Assy, T R 90	206-040-402-3	1615-01-214-9167
Generator, Tachometer	206-062-627-1	6680-00-179-2175
Platform, Cargo, Air	206-706-016-5	1560-00-484-1069
Float Kit, Landing G	206-706-035-3	1620-00-372-4592
Modification Kit, Ai	206-706-132-5	1560-00-113-6275
Support, Scope, Blade	T101532	4920-00-136-5008

4. INITIAL AIRCRAFT TAMMS-A (THE ARMY MAINTENANCE MANAGEMENT SYSTEM - AVIATION) ENTRY -

NOTE

When complying with the requirements of this message, complete forms and records entries per DA PAM 738-751. ULLS-A units will use appropriate "E" forms.

Upon receipt of this message, make the following entry on the DA Form 2408-13-1. Enter a Horizontal Dash //-// status symbol with the following statement: "Comply with requirements of

H-58-14-SOF-05 prior to the next flight, but not to exceed 11 AUG 14."

5. COMPLIANCE REPORTING REQUIREMENTS -

NOTE

Report compliance with this message via the AMCOM Message Tracking System (AMTRACKS) at ["https://amtracks.redstone.army.mil"](https://amtracks.redstone.army.mil). Unit personnel designated to submit reports must establish a profile in AMTRACKS.

5.1. Aircraft Initial Compliance Report - Submit the report via AMTRACKS by 14 AUG 14 per AR 750-6. The report will consist of the Aircraft SN, MDS, and Date of Initial TAMMS-A Entry for all assigned aircraft. This report only confirms the unit has made the initial logbook entry.

5.2. Aircraft Final Compliance Report - Submit the report via AMTRACKS by 7 FEB 15 per AR 750-6. This report will include the Inspection Results/Comments (enter "PASS" or "FAIL" - if entering "FAIL" include the number of unserviceable nuts and locations found), and check the box "Entered on DA Form 2408-15".

NOTE

Facilities which maintain Retail Stock must have a general user registered in AMTRACKS to submit the required compliance report. This registration does not require entry of an aircraft SN or MDS. Questions regarding registration can be forwarded to the AMTRACKS Administrators at ["redstone-amtracks@conus.army.mil"](mailto:redstone-amtracks@conus.army.mil).

5.3. Retail Stock Task/Inspection Compliance Report (Installation level and below) - Submit report via AMTRACKS by 4 SEP 14 per AR 750-6. This report will only be submitted for Nuts which are identified as suspect and will include the Component Nomenclature, PN, NSN, and Inspection Results (enter the number of suspect nuts).

5.4. Wholesale Stock Task/Inspection Compliance Report (including Depot Stock, Depot Maintenance, and Overhaul/Repair Facilities) - Report compliance with message per paragraph 8 to Wholesale POC in paragraph 13.3 by 4 SEP 14.

6. SPECIAL PROVISIONS TO MESSAGE REQUIREMENTS (AIRCRAFT) -

NOTE

For message purposes, aircraft away from home station

are defined as those not having access to a maintenance facility capable of meeting all message requirements.

Aircraft in Transit (surface/air shipment/ferry status/ aircraft away from home station) - Unit commanders unable to comply with the requirement specified in paragraph 4 may defer making the initial aircraft TAMMS-A entry until arrival at final destination. Adjust the date in the TAMMS-A entry to be 7 days after arrival at destination.

7. TECHNICAL PROCEDURES/INSTRUCTIONS - Unless otherwise stated, all message requirements shall be completed by the suspense date listed in paragraph 4.

NOTE

This message includes a required addendum. If the addendum is not received with this message, it may be viewed/downloaded at ["https://asmprd.redstone.army.mil"](https://asmprd.redstone.army.mil).

NOTE

Requests for exceptions (waivers) to this message will be submitted per GEN-14-AMAM-01, Message Exception (Waiver) Process, and AR 750-6. For help, contact the AMCOM Safety POC in paragraph 13.5.1.

7.1. CRITICAL COMPONENTS INSPECTION - This phase of the inspection must be completed by the suspense per paragraph 4.
7.1.1. Referring to the addendum and TM 55-1520-228-23-1, identify the list of "Critical Components" to be inspected and the location of the subject Self Locking Retaining Nuts.

NOTE

The stamped markings may or may not be visible due to application of paint or Corrosion Preventative Compound. DO NOT REMOVE an undamaged Self Locking Retaining Nut just to identify the stamped markings.

7.1.2. Using an inspection mirror and flashlight or an appropriate borescope, inspect all of the Self Locking Retaining Nuts installed on the Critical Components for the presence of cracks or the stamped letters "A A" or "A A A".
7.1.2.1. If there are NO cracked nuts and no nuts stamped with "A A" or "A A A" found installed on ANY of the Critical Components, this portion of the inspection is complete. Proceed to paragraph 7.2.
7.1.2.2. If ANY installed nuts are cracked or identified with the "A A" or "A A A" stamp, make the following entry on DA

Form 2408-13-1. Enter a Grounding "X" status symbol with the following statement: "[####] Retaining Nuts unserviceable per H-58-14-SOF-05." Replace [####] with applicable component location.

7.2. **Non-CRITICAL COMPONENTS INSPECTION** - For this phase of the inspection, make the following entry on the DA Form 2408-13-1. Enter a Horizontal Dash //-// status symbol with the following statement: "Self Locking Nuts require inspection per H-58-14-SOF-05 at [####.#] aircraft hours but not to exceed 7 FEB 15." Calculate [####.#] as the aircraft hours at the next scheduled Phase Maintenance Inspection.

7.2.1. Referring to the addendum and TM 55-1520-228-23-1, identify the list of "Non-Critical Components" to be inspected and the location of the subject Self Locking Retaining Nuts.

7.2.2. Using an inspection mirror and flashlight or an appropriate borescope, inspect all of the Self Locking Retaining Nuts installed for the presence of cracks or the "A A" or "A A A" stamped marking.

7.2.2.1. If there are NO cracked nuts and NO nuts stamped with "A A" or "A A A" found installed on ANY of the Critical Components, this portion of the inspection is complete. Proceed to paragraph 7.3.

7.2.2.2. If ANY installed nuts are cracked or identified with the "A A" or "A A A" stamp, make the following entry on DA Form 2408-13-1. Enter a Grounding "X" status symbol with the following statement: "[####] Retaining Nuts unserviceable per H-58-14-SOF-05." Replace [####] with applicable component location.

7.3. Clear the initial entry from paragraph 4 and note compliance on DA Form 2408-15.

8. PROCEDURES/INSTRUCTIONS FOR ASSEMBLIES/COMPONENTS/PARTS IN WORK OR IN STOCK (AT ALL LEVELS INCLUDING WAR RESERVES) -

Annotate the serviceability tag with: "Self Locking Retaining Nuts, H-58-14-SOF-05, not complied with." Do not remove original condition tags. Activities at all levels will continue to annotate the serviceability tag of newly received stock until 7 FEB 15.

8.1. Items in Retail Stock - Commanders and facility managers that maintain stock at installation level and below will complete the following procedures.

8.1.1. Suspend issue of affected items listed in the addendum and paragraph 3 until in compliance with message requirements.

8.1.2. Contact the supported aviation unit, as required, to perform the procedures required on affected items.

8.1.3. Conduct physical inspection of all nuts to include spare assemblies located in Prescribed Load Lists/Authorized Stock

Lists and uninstalled nuts in bench stock/storage locations per the addendum.

8.1.4. All discrepant nuts will be disposed per paragraph 10.4 of this message.

8.1.5. Report compliance per paragraph 5.3 of this SOF.

8.2. Items in Wholesale Stock (including Depot Stock, Depot Maintenance, and Overhaul/Repair Facilities) -
Annotate the Serviceability Tag of all items in the addendum and paragraph 3 per paragraph 8.

9. SPECIAL TOOLS AND FIXTURES REQUIRED - N/A.

10. SUPPLY/PARTS (REQUISITION/DISPOSITION) -

10.1. Parts Required -

Nomenclature	PN/NSN	Qty	Cost ea.	Total \$
Nut, Self Locking	MS21042L4	Unknown*	\$0.19	TBD*
	5310-00-807-1475			

Total cost per aircraft = TBD*

* The quantity required and total will be determined as a result of the inspection.

10.2. Bulk and Consumable Materials - N/A.

NOTE

Project Code X01 (X-ray Zero One) is required to track stock costs as a result of message actions.

10.3. Requisitioning Instructions - Requisition replacement parts using normal supply procedures. All requisitions shall use Project Code "X01".

10.4. Disposition of Discrepant Parts/Components -
Demilitarize/mutilate per TM 1-1500-328-23.

10.5. Disposition of Hazardous Material - N/A.

11. MAINTENANCE APPLICATION -

11.1. Category of Maintenance - Field at Aviation Maintenance Company.

11.2. Estimated Time Required -

11.2.1. Time to complete inspection - Total of 20.0 man-hours using 2 persons.

NOTE

The time stated below does not include time for Maintenance Operational Checks or test flights.

11.2.2. Time for repair/replacement - Total of 1.0 man-hour using 2 person.

12. PUBLICATION REQUIREMENTS -

- 12.1. References -
 - 12.1.1. AR 750-6.
 - 12.1.2. DA Pam 738-751.
 - 12.1.3. TM 1-1500-328-23.
 - 12.1.4. TM 55-1520-228-23-1 Series.
- 12.2. Publication Changes - N/A.

13. POINTS OF CONTACT -

- 13.1. Technical POCs -
 - 13.1.1. Primary - Mr. Joe Wathen (Avion), DSN 788-2499 or 256-842-2499. Email: "joseph.e.wathen.ctr@mail.mil".
 - 13.1.2. Alternate - Mr. Jay Wicker, DSN 897-5687 or 256-313-5687. Fax: 897-5668 or 256-313-5668. Email: "thomas.j.wicker4.civ@mail.mil".
- 13.2. Project/Product Manager's (PM) Office POCs -
 - 13.2.1. Primary - Mr. Charles Wright, DSN 645-7077 or 256-955-7077. Fax: DSN 645-7125 or 256-955-7125. Email: "charles.d.wright.civ@mail.mil".
 - 13.2.2. Alternate - Mr. Jack McRoberts, DSN 645-8265 or 256-955-8265. Fax: 897-1541 or 256-313-1541. Email: "ellis.j.mcroberts.civ@mail.mil".
- 13.3. Wholesale Materiel POC (DLA) - Ms. Felicia Barwell, DSN 695-5208 or 804-279-5208. FAX: DSN 655-2562 or 804-279-6562. Email: "felicia.barwell@dla.mil".
- 13.4. Forms and Records POCs -
 - 13.4.1. Primary (TAMMS) - Mr. Dean Geiselhart, DSN 788-2971 or 256-842-2971. Email: "dean.d.geiselhart.civ@mail.mil".
 - 13.4.2. Primary (MCDS/LCF) - Mr. Jeff Sutherland, DSN 788-0860 or 256-842-0860. Email: "jeffrey.a.sutherland.civ@mail.mil".
 - 13.4.3. Alternate (TAMMS and MCDS/LCF) - Mr. Lloyd Willits, DSN 746-3598 or 256-876-3598. Email: "lloyd.e.willits.civ@mail.mil".
- 13.5. AMCOM Safety POCs - Mr. Frank Rosebery, DSN 788-8631 or 256-842-8631. Email: "james.f.rosebery.civ@mail.mil".
 - 13.5.1. Safety (Alternate) - Mr. Don Swallom, DSN 788-8641 or 256-842-8641. Email: "donald.w.swallom.civ@mail.mil".
 - 13.5.2. AMTRACKS (Primary) - Mr. Vic Mosley, DSN 788-8620 or 256-842-8620. Email: "victor.e.mosley.civ@mail.mil".
 - 13.5.3. AMTRACKS (Alternate) - Ms. Teri Phipps, DSN 897-2097 or 256-313-2097. Email: "teri.l.phipps.civ@mail.mil".
- 13.6. Foreign Military Sales POCs -
 - 13.6.1. Primary - Ms Tina Pizits, DSN 746-9019 or 256-876-9019. Email: "tina.m.pizitz.civ@mail.mil".
 - 13.6.2. Alternate - Ms. Janett H. Carter, DSN 645-2653 or 256-955-2653 Email: "janett.h.carter.civ@mail.mil".
 - 13.6.3. Alternate - Mr. Robert Dubose, DSN 788-1068 or

256-842-1068. Email: "robert.w.dubose.civ@mail.mil".

Addendum 1 to H-58-14-SOF-05 Discrepant Locking Nuts

Critical Nuts OH-58A/C					
Group Description	Figure Number	Sheet Number	Item Number	Quantity	Visibility
Fuselage Structure Assembly	11	1 of 2	69	2	Only inserts. Nut not used verification aircraft.
UPPER CABIN ROOF SHELL INSTALLATION	21	1 of 1	6	6	Visual inspection found 7/16 inch nuts. Access cover on upper cabin roof beam removed.
UPPER CABIN ROOF BEAM INSTALLATION	22	1 of 1	4	8	Borescope inspection required. Aft 4 nuts can be accessed through removal of the tail rotor flight control panel. The forward 4 nuts require the aft 2 nuts be accessed through the access cover on the upper cabin roof beam panel. The forward 2 nuts must be accessed through the right side wire hole forward of the nut.
Tailboom Installation	32	1 of 2	160	4	Borescope or tail cone cover removed. Different methods can be used. For visual inspection removal of tail fin or tail cone.
Tailboom Fin Installation	34	1 of 1	7	4	Visual. Most acft use nutplate instead of nut.
Engine Mount Installation	35	1 of 1	4	6	Borescope and visual. Aft 2 nuts require mirror or borescope. Forward 4 nuts require removal of left and right access panel for visual.
Seat Installation	39	1 of 1	3	6	Visual
Seat Installation	39	1 of 1	15	8	Visual
SEATING INSTALLATION	40	1 of 1	1	8	Visual
Engine Assembly	48	2 of 3	129A	4	Visual
PYLON INSTALLATION	56	1 of 1	22	2	Visual
MAIN ROTOR HUB AND BLADE INSTALLATION	57	1 of 1	1	1	Visual
MAIN ROTOR HUB AND BLADE INSTALLATION	57	1 of 1	16	4	Visual, Do not inspect blade tip self locking nuts.
MAIN ROTOR HUB ASSEMBLY	58	1 of 2	8A	10	Visual. Oil reservoir nuts not required as it is no longer used.
TAIL ROTOR INSTALLATION	59	1 of 1	61	3	Visual
TRANSMISSION ASSEMBLY	62	2 of 2	23	27	Visual
Freewheeling Assembly and Installation	65	1 of 1	4	3	Visual
Freewheeling Assembly and Installation	65	1 of 1	27	3	Visual
Drive Shaft Assembly	66	1 of 1	not shown	8	Visual
Tail Rotor Drive Shaft Installation	67	1 of 2	1	28	Visual
Tail Rotor Drive Shaft Installation	67	1 of 2	23	1	Verification aircraft installation did not use nut.
Tail Rotor Drive Shaft Installation	67	1 of 2	28	1	Verification aircraft installation did not use nut.
Tail Rotor Drive Shaft Installation	67	1 of 2	32	4	Visual
Tail Rotor Drive Shaft Installation	67	1 of 2	64	12	Qty 6 come as brg assy with nut. Qty 6 require removal of drive shaft.
Tail Rotor Gearbox Assembly	68	1 of 1	17	3	Visual. May have paint coating
Flight Controls Hydraulic System Installation	69	2 of 2	55	15	Visual. Forward upper cowling removed.
Collective Controls Installation	92	1 of 1	47	4	Mirror Visual. Seat and Lower Seat panel removal
Jackshaft Assembly	93	1 of 1	1	6	Visual. Center panel/map holer removed
Jackshaft Assembly	93	1 of 1	67	2	Visual. Center panel/map holer removed
Control Installation, Cyclic	95	1 of 2	25	4	Visual. Mirror. Seat panel removal. Aft 2 nuts through broom closet and mirror with seat panel removed.

Addendum 1 to H-58-14-SOF-05 Discrepant Locking Nuts

Critical Nuts OH-58A/C					
Control Installation, Cyclic	95	2 of 2	25	7	Visual. Mirror. Seat panel removal. Aft 2 nuts through broom closet and mirror with seat panel removed.
Controls Installation, Anti-Torque	99	1 of 2	9	1	Borescope or visual. Borescope through right side pedal
Cyclic and Collective Controls Installation	101	1 of 1	32	2	Visual with overhead sound proofing removed.
Cylinder and Support Assembly	102	1 of 1	7	6	Visual. Fwd upper cowling removed.
Non-Critical Nuts OH-58A/C					
Group Description	Figure Number	Sheet Number	Item Number	Quantity	Visibility
Kit, Float Landing Gear	46	1 of 1	7	48	
Kit, Auxillary Fuel System	91	1 of 1	20	1	
Non-Critical Nuts Ground Support Equipment					
Group Description	Figure Number	Sheet Number	Item Number	Quantity	Visibility
Air Cargo Platform	43	1 of 1	13	8	
Airframe Tools	A8	1 of 1	2	2	

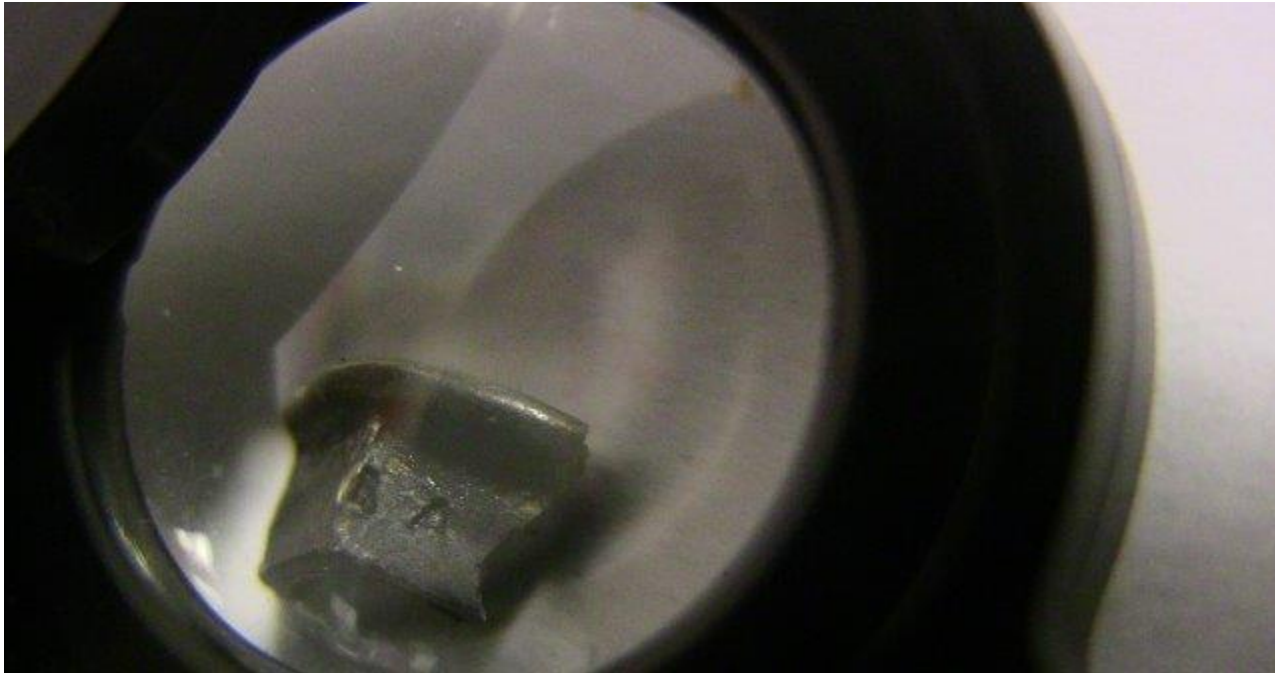


Figure 1. Cracked nut with markings "A A" viewed through magnifying glass

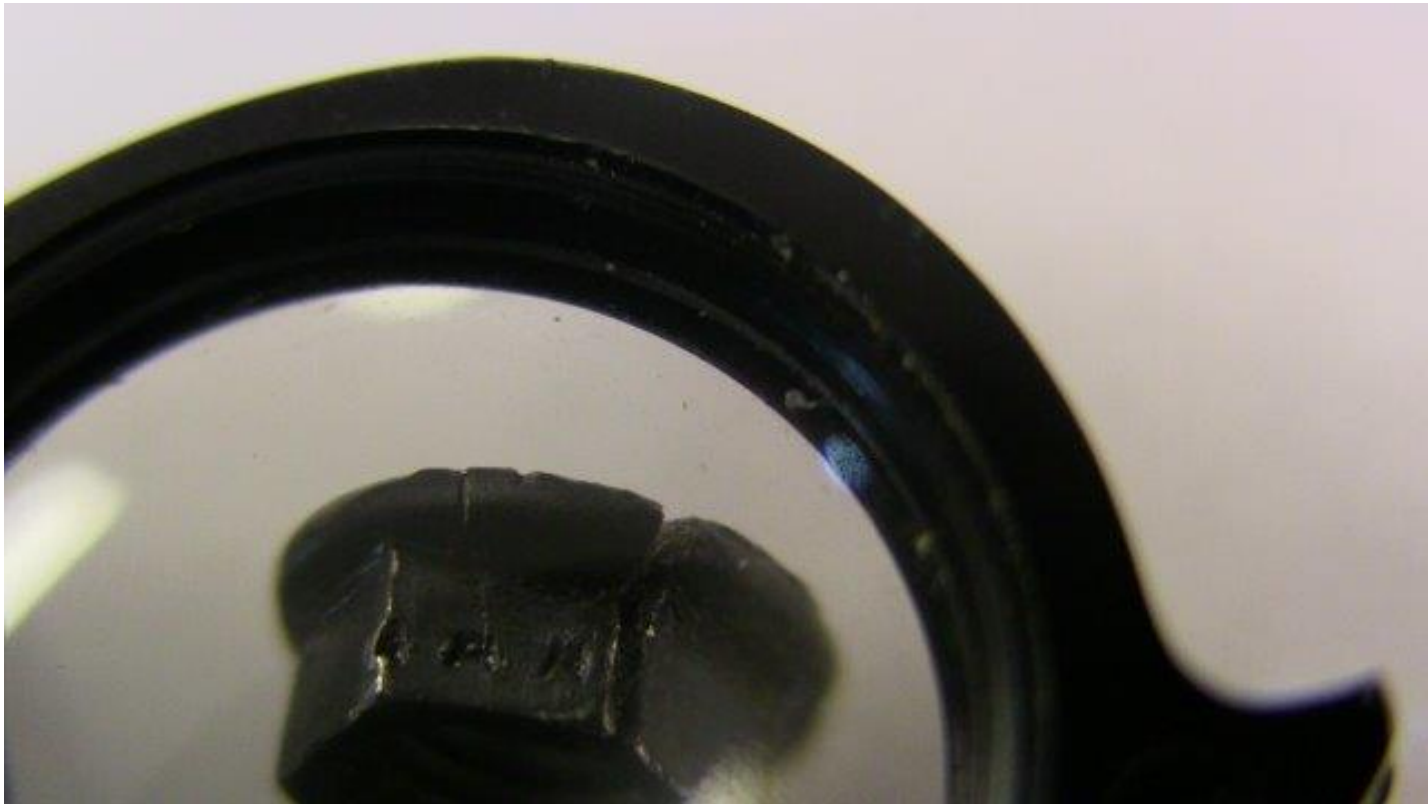


Figure 2. Cracked nut with markings “A A A” viewed through magnifying glass. The first “A” appears to be a partial stamp.

Adendum 2 to H-58-14-SOF-05, Descrepant Self Locking Nuts

